CLAIMS

1. A polynucleotide selected from the group consisting of (a) to (d) below:

(a) a polynucleotide comprising a protein-coding region of the nucleotide sequence of SEQ ID NO: 1;

(b) a polynucleotide encoding a protein comprising the amino acid sequence of SEQ ID NO: 2;

(c) a polynucleotide comprising the amino acid sequence of SEQ ID NO: 2 in which one or more amino acids are substituted, deleted, inserted and/or added, said polynucleotide encoding a protein functionally equivalent to a protein comprising the amino acid sequence of SEQ ID NO: 2; and

(d) a polynucleotide hybridizing to a DNA comprising the nucleotide sequence of SEQ ID NO: 1 under stringent conditions, said polynucleotide encoding a protein functionally equivalent to a protein comprising the amino acid sequence of SEQ ID NO: 2.

2. A protein encoded by the polynucleotide of claim 1.

3. A vector comprising the polynucleotide of claim 1.

4. A transformant carrying the polynucleotide of claim 1 or the vector of claim 3.

5. A method for producing the protein of claim 2, said method comprising culturing the transformant of claim 4 and recovering an expression product.

6. An oligonucleotide having a chain length of at least 15 nucleotides, said oligonucleotide comprising a nucleotide sequence complementary to the nucleotide sequence of SEQ ID NO: 1 or to a complementary strand thereof.

7. A method for detecting a polynucleotide comprising the nucleotide sequence of SEQ ID NO: 1, said method comprising contacting the oligonucleotide of claim 6 with a test sample and observing hybridization of said oligonucleotide.

8. A method for synthesizing a polynucleotide comprising the nucleotide sequence of SEQ ID NO: 1, said method comprising contacting the oligonucleotide of claim 6 with a test sample and synthesizing the complementary strand using said oligonucleotide as a primer.

9. A reagent for detecting mesangial cells, said reagent comprising the oligonucleotide of claim 6.

10. A method for detecting mesangial nephritis, said method comprising measuring an expression level of the polynucleotide of claim 1 in a biological sample, and comparing said level with that obtained from a normal sample.

11. The method of claim 10, wherein said biological sample is a mesangial cell.

12. The method of claim 10, wherein said expression level is measured using, as an indicator, an mRNA comprising a nucleotide sequence selected from the nucleotide sequence of SEQ ID NO: 1.

13. The method of claim 10, wherein said expression level is measured using, as an indicator, the protein of claim 2 or a fragment thereof.

14. An antisense polynucleotide against the polynucleotide of claim 1 or a portion thereof.

15. An antibody recognizing the protein of claim 2.

16. The antibody of claim 15, recognizing a portion of a protein comprising an amino acid sequence selected from the amino acid sequence of SEQ ID NO: 2.

17. An immunological assay for measuring the protein of claim 2 or a fragment thereof based on immunological binding of the antibody of claim 15 to the protein of claim 2 or a fragment thereof.

18. A reagent for immunological assay of the protein of claim 2 or a fragment thereof, said reagent comprising the antibody of claim 15.

19. A transgenic non-human vertebrate, wherein an expression level of a gene encoding Meg-1 is altered.

20. The transgenic non-human vertebrate of claim 19, wherein said non-human vertebrate is a mouse.

21. The transgenic non-human vertebrate of claim 20, wherein said transgenic non-human vertebrate is a knockout mouse in which the expression of a gene encoding Meg-1 is inhibited.